## ABSTRACT

It is an object of the present invention to downsize a receiver of a mobile phone, its base station and the like. In the invention, a level measurement circuit 15a, a frequency offset detection circuit 16a, a frequency correction circuit 17a, a channel skewness detection circuit 18a, a channel skewness correction circuit 19a, and a maximum ratio synthesis circuit 3a are constructed by CORDICs 153, 171, 182, 191, 31 to 3M, and 200. Further, the level measurement circuit 15a and the frequency offset detection circuit 16a share the CORDIC 153 with each other.

5

10